

WHAT IS CLAIMED IS:

1. A method for initializing a digital image reproduction system using error diffusion, the method comprising:
  - a) initializing a first error buffer with a first set of seed values, wherein at least one of the seed values varies numerically from others of the seed values; and
  - b) using the seed values in the error buffer to start an error diffusion process.
- 5 2. The method of claim 1 wherein the method further comprises initializing at least one other error buffer with a different set of seed values.
- 10 3. The method of claim 1 wherein the first set of seed values is generated using random noise.
4. The method of claim 1 wherein the first set of seed values are generated using pseudo-random noise.
- 15 5. The method of claim 2 wherein the other set of seed values contains values negatively correlated with the values of the first set.
6. The method of claim 1 wherein the initializing is performed in hardware.
- 15 7. The method of claim 1 wherein the initializing is performed at initialization of the printing system.
- 20 8. A computer readable medium, the medium containing software code comprising:
  - a) code for initializing a first error buffer with a first set of seed values;
  - b) code for using the seed values to start an error diffusion process.
9. The medium of claim 8, wherein the software code further comprises code to initialize at least one other error buffer with a different set of seed values.
10. The computer readable medium of claim 7, wherein the medium is a compact disc.
11. The computer readable medium of claim 7, wherein the medium is a downloadable file.
- 25 12. A method for initializing a digital image reproduction system using error diffusion, the method comprising:
  - a) initializing a first error buffer with a first set of seed values;
  - b) initializing at least one other error buffer with an alternate set of seed values, wherein the alternate set of seed values varies numerically from the first set of seed values; and
  - 30 c) using the seed values in the error buffer to start an error diffusion process.
13. The method of claim 12 wherein the first set of seed values further comprises replicas of a constant.

14. The method of claim 13 wherein the alternate set of seed values comprises replicas of a different constant than that used in the first set.
15. The method of claim 12 wherein the at least one other error buffer further comprises three error buffers, wherein each set of seed values in each buffer further comprise replicas of constants, each buffer having a different constant.  
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